

REMARKS

The claims are provisionally rejected as being unpatentable over copending application Serial No. 10/773,547.

Applicants maintain the position that the claimed subject matter would not have been obvious to one skilled in the art from the disclosure of application Serial No. 10/773,547. Nevertheless, in order to minimize issues for appeal, and advance prosecution toward early allowance, a terminal disclaimer is filed herewith.

The accompanying terminal disclaimer overcomes the examiner's obviousness-type double patenting rejection. Withdrawal is requested.

Claims 1-6 and 11-20 are rejected under 35 U.S.C. § 102 (b) as being anticipated by or, in the alternative, under 35 U.S.C. § 103 (a) as being obvious over vanDrongelen et al (US 6,103,814). The vanDrongelen patent is cited as showing hot melt adhesives containing a thermoplastic elastomer and that can have a viscosity and creep value falling within the scope of the claim. The examiner refers to Table 21 and to col. 55, lines 21-57 of vanDrongelen. It is the examiner's position that in view of this disclosure of vanDrongelen the claims of applicant are anticipated.

Applicants disagree.

The adhesive of the subject application are formulated for application at low temperatures and to have performance properties making them particularly well suited for use as elastic attachment adhesives. The claimed adhesives have a viscosity at 275°F of less than about 8,000 centipoise, a yield stress of less than about 80 psi and a creep performance for a bond made through strand coating of less than about 15%.

The vanDrongelen patent does not disclose a low application temperature hot melt

adhesive that has a viscosity at 275°F of less than about 8,000 centipose, a yield stress of less than about 80 psi and a creep performance for a bond made through strand coating of less than about 15%, let alone an adhesive that has a creep performance for a bond made through spiral coating of less than about 15%.

This reference merely discloses that hot melt adhesives having improved viscosity and performance can be made when using a particular tackifying resin (melt viscosity of about 60,000 cps or less at a temperature of 120°C (250°F) and measured as elastic retention of about 70% or more). While the reported data in Table 21 appears to show a viscosity of less than 8000cps at 285°F, clearly the viscosity would be greater than 8000 cps if at the lower temperature of 275°F. Moreover, there is no disclosure that this is even a temperature contemplated for adhesive application. The disclosure at col. 55, lines 21-57, discloses method of determining creep performance (measured as elastic retention/percent of original length) for a bond made through spiral coating. The adhesive of vanDrongelen is applied at a temperature of 160°C (320°F) through a nozzle heated to 160°C (320°F). I.e., the adhesive of vanDrongelen is not a low application temperature hot melt adhesive (an adhesive capable of being applied at a temperature of between about 200°F and 300°F, see applicants' disclosure at page 3, lines 12-19). If the adhesive of vanDrongelen had been applied at 275°F the viscosity would have been much greater than 8000 cps, and the adhesive would not have been useful for elastic attachment applications. It is noted that even at conventional application temperatures, the creep performance (when measured as % retraction) is at best 30% (see Table 4, col. 30 of vanDrongelen).

Applicants also note that vanDrongelen is silent as to the presence of an ionomer resin as required in claims 17-19.

For a prior art document to anticipate, all elements of the claim must be disclosed within

the four corners of the document. The vanDrongelen patent does not disclose any formulation that can be applied at low temperatures (an adhesive capable of being applied at a temperature of between about 200°F and 300°F, see applicants' disclosure at page 3, lines 12-19) or an adhesive that has a viscosity at 275°F of less than about 8,000 centipoise, or use of an ionomer (as required in claims 17-19). Applicants' claimed adhesive is not anticipated by vanDrongelen.

Moreover, there is nothing in the vanDrongelen patent that would motivate the skilled artisan to formulate adhesives having a low viscosity (a viscosity at 275°F of less than about 8,000 centipoise) that can be used (i.e., applied) at low temperatures, let alone expect that such adhesive would have a yield stress of less than about 80 psi and a creep performance for a bond made through strand coating of less than about 15%. The claimed invention is not obvious over vanDrongelen.

In response to the examiner's further comments (see Office action dated November 10, 2008, numbered paragraph 7), applicants disagree that there is clear overlap which anticipates or otherwise renders obvious the claimed invention. The examiner's position that the patent shows the same compositional ingredients and amounts and thus would possess or render obvious the properties of the adhesive claimed by applicants is without merit. The claims require ingredients that can be used to formulate a low application adhesive that will give the required performance properties. There is no disclosure or suggestion that any hot melt can be formulated that could be applied at low temperatures and that would have a viscosity at 275°F of less than about 8,000 centipoise, a yield stress of less than about 80 psi and a creep performance for a bond made through strand coating of less than about 15%, let alone an adhesive that has a creep performance for a bond made through spiral coating of less than about 15%. As noted above, there is no disclosure or suggestion of the use of an additive, such as the ionomer required for use in the

practice of the inventions set forth in claims 17-19.

The examiner's position that the fact that the adhesive of vanDrongelen is reported to have a viscosity of less than 8000cps at 285°F does not mean it will have a viscosity greater than 8000cps at 275°F is without merit, as is the assertion that there is no application temperature claimed. One skilled in the art would recognize that if a hot melt adhesive has a viscosity of e.g., 7,320 at 285°F, that the viscosity would be greater than 8000 at a lower temperature of 275°F. From Table 21 it can be seen that adhesive formulations having viscosities of 7,450; 6,930; 7,320; 9,620 and 6,850 cps at 285°F have a viscosity of 48,400; 25,350; 24,200; 38,750; and 22,000, respectively, at 250°F. Regarding the examiner's assertion that there is no application temperature claimed, the claims recite "low application temperature" which is defined within the subject application as being an adhesive capable of being applied at a temperature of between about 200°F and 300°F, see applicants' disclosure at page 3, lines 12-19.

The vanDrongelen patent fails to teach or suggest any adhesive having a viscosity at 275°F of less than about 8,000 centipoise, which makes it suitable for application at low temperatures. As the formulations of vanDrongelen do not even have the required viscosity, it would not be reasonable to presume, as urged by the examiner, that the adhesive of vanDrongelen would possess the characteristics claimed by applicants.

Claims 1-6 and 11-20 are not anticipated by, or obvious over, vanDrongelen. Withdrawal of this prior art rejection is requested.

Claims 7-10 are rejected under 35 U.S.C. § 103 (a) as being unpatentable over vanDrongelen et al (US 6,103,814) in view of Boyce et al. (U.S. 4,284,542).

The deficiencies vanDrongelen is discussed above. Boyce discloses ionomer-based hot melt adhesives and sealant compositions that contain ammonium phosphate and have improved

high temperature viscosity. The Boyce compositions find use as glass sealants or adhesives for automobile windows. Preferably, the compositions also contain an inorganic filler, such as carbon black. Small quantities of a reinforcing agent may also be used and preferred reinforcing resins are disclosed at col. 6, lines 47-68. Such reinforcing agents are disclosed as being used in amounts of up to 30 parts per hundred of the terpolymer ionomer resin. See also Example 7. Boyce discloses ionomer-based adhesives, not hot melt adhesives that contain an ionomer additive. Boyce describes adhesives having improved high temperature viscosity stability. While viscosity is measured at 205°C (401°F), the viscosity is not reported, only the change in viscosity over time. Boyce fails to suggest any adhesive formulation, or any ingredients that can be added to the formulation of vanDrongelen that would produce a hot melt adhesive that has a viscosity at 275°F of less than about 8,000 centipoise, let alone would also have a yield stress of less than about 80 psi and a creep performance for a bond made through strand coating of less than about 15%. Boyce fails to cure the defects of vanDrongelen and, as such, the combined disclosures would not render obvious applicants' claimed adhesive.

The invention of claims 7-10 is not obvious over vanDrongelen in view of Boyce.

Withdrawal of this Section 103 rejection is requested.

Respectfully submitted,

/Cynthia L. Foulke/

Cynthia L. Foulke
Reg. No. 32,364

March 10, 2009

Henkel of America, Inc.
P. O. Box 6500
10 Finderne Avenue
Bridgewater, New Jersey 08807-0500

Telephone No.: 908-685-7483